

What is claimed is:

1. An occupant load sensor interposed between a floor side seat fixing member and a seat side fixing member and provided for measuring a load of an occupant sitting on a seat, comprising:

a flange portion which is attached to one of said floor side seat fixing member and said seat side fixing member while being in surface contact therewith;

a bolt portion which is formed in a vertical direction with respect to said flange portion, and is attached to the other of said floor side seat fixing member and said seat side fixing member via a nut; and

a sensor which is arranged in a strain surface provided between said flange portion and said bolt portion, and is provided for detecting a load applied to said bolt portion in an axial direction.

2. An occupant load sensor interposed between a floor side seat fixing member and a seat side fixing member and provided for measuring a load of an occupant sitting on a seat, wherein said occupant load sensor comprising:

a fixing portion which is attached to one of said floor side seat fixing member and said seat side fixing member;

a bolt portion which is inserted to a through hole in the other of said floor side seat fixing member and said seat side fixing member and is attached via a nut; and

a sensor which is arranged in a strain surface provided between said fixing portion and said bolt portion, and is provided for detecting a load applied to said bolt portion in an axial direction, and

wherein said occupant load sensor is fixed to the other of said floor

side seat fixing member and said seat side fixing member via a sleeve arranged in an outer periphery of said bolt portion, and a liner member interposed between said sleeve and the through hole in the other of said floor side seat fixing member and said seat side fixing member.

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3. An occupant load sensor interposed between a floor side seat fixing member and a seat side fixing member and provided for measuring a load of an occupant sitting on a seat, wherein said occupant load sensor comprising:

a flange portion which is attached to one of said floor side seat fixing member and said seat side fixing member while being in surface contact therewith;

a bolt portion which is formed in a vertical direction with respect to said flange portion and is attached to the other of said floor side seat fixing member and said seat side fixing member via a nut; and

a sensor which is arranged in a strain surface provided between said flange portion and said bolt portion, and is provided for detecting a load applied to said bolt portion in an axial direction, and

wherein said occupant load sensor is fixed to the other of said floor side seat fixing member and said seat side fixing member via a sleeve arranged in an outer periphery of said bolt portion, and a bush interposed between said sleeve and a through hole in the other of said floor side seat fixing member and said seat side fixing member.

4. An occupant load sensor interposed between a floor side seat fixing member and a seat side fixing member and provided for measuring a load of an occupant sitting on a seat, wherein said occupant load sensor comprising:

a flange portion which is attached to one of said floor side seat fixing

member and said seat side fixing member while being in surface contact therewith;

a bolt portion which is formed in a vertical direction with respect to said flange portion and is attached to the other of said floor side seat fixing member and said seat side fixing member via a nut; and

5 a sensor which is arranged in a strain surface provided between said flange portion and said bolt portion, and is provided for detecting a load applied to said bolt portion in an axial direction, and

wherein said occupant load sensor is fixed to the other of said floor side seat fixing member and said seat side fixing member via a sleeve arranged
10 between said bolt portion and a through hole in the other of said floor side seat fixing member and said seat side fixing member, and a flat washer inserting said sleeve therethrough and interposed between the other of said floor side seat fixing member and said seat side fixing member and a nut.

15 5. An occupant load sensor as claimed in any one of claims 2 to 4, wherein said sleeve is a part of the collar.

6. An occupant load sensor as claimed in any one of claims 1 to 5, wherein a pair of said floor side seat fixing members are connected via a bracket.

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7. An occupant load sensor interposed between a floor side seat fixing member and a seat side fixing member and provided for measuring a load of an occupant sitting on a seat, comprising:

a flange portion which is provided with a plurality of screw holes for
25 fastening by bolts and is attached to one of said floor side seat fixing member and said seat side fixing member while being in surface contact therewith;

an attaching portion which is formed in a vertical direction with respect to said flange portion, and is attached to the other of said floor side seat fixing member and said seat side fixing member; and

a sensor which is provided for detecting a load applied to said attaching
5 portion in an axial direction,

wherein at least one of a plurality of screw holes provided in said flange portion is fastened by bolts so as to allow a motion between said flange portion and one of said floor side seat fixing member and said seat side fixing member.

10 8. An occupant load sensor interposed between a floor side seat fixing member and a seat side fixing member and provided for measuring a load of an occupant sitting on a seat, comprising:

a flange portion which is provided with a plurality of screw holes for fastening by bolts and is attached to one of said floor side seat fixing member
15 and said seat side fixing member while being in surface contact therewith;

a bolt portion which is formed in a vertical direction with respect to said flange portion, and is attached to the other of said floor side seat fixing member and said seat side fixing member via a nut; and

a sensor which is provided for detecting a load applied to said bolt
20 portion in an axial direction,

wherein one of a plurality of screw holes provided in said flange portion is fixed by a shoulder bolt provided with a step portion higher than a thickness of one of said floor side seat fixing member and said seat side fixing member, whereby an air gap is provided between a head of the shoulder bolt and one
25 of said floor side seat fixing member and said seat side fixing member.

9. An occupant load sensor as claimed in claim 8, wherein said occupant load sensor is fixed to the other of said floor side seat fixing member and said seat side fixing member via a sleeve arranged in an outer periphery of said bolt portion, and a bush interposed between said sleeve and a through
5 hole in the other of said floor side seat fixing member and said seat side fixing member.

10. An occupant load sensor as claimed in claim 8, wherein said occupant load sensor is fixed to the other of said floor side seat fixing member and
10 said seat side fixing member via a sleeve arranged between said bolt portion and a through hole in the other of said floor side seat fixing member and said seat side fixing member, and a flat washer inserting said sleeve therethrough and interposed between the other of said floor side seat fixing member and said seat side fixing member and the nut.

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11. An occupant load sensor as claimed in any one of claimed 9 to 10, wherein said sleeve is a part of the collar.